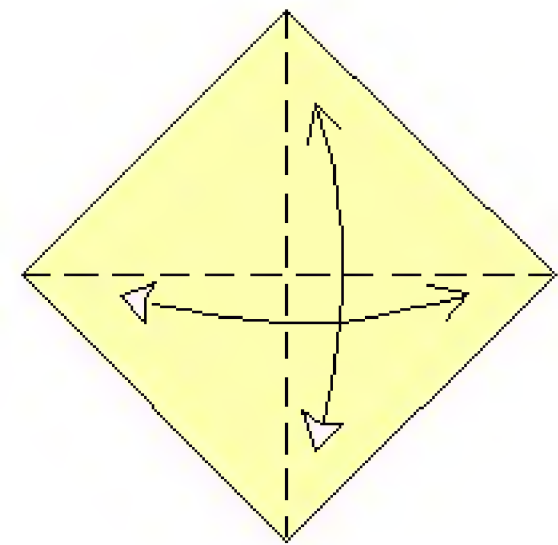
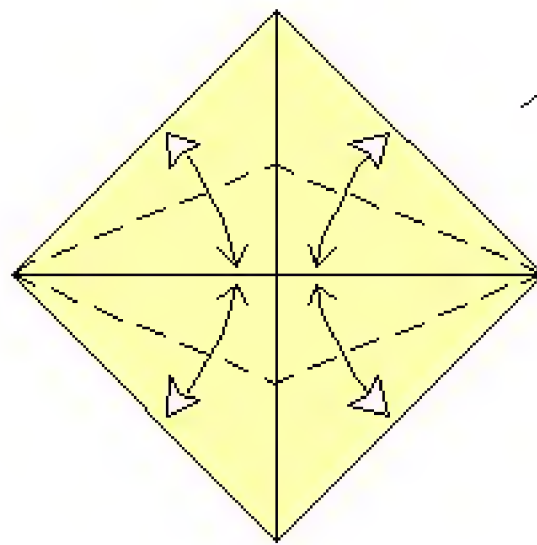


# Spined Ant

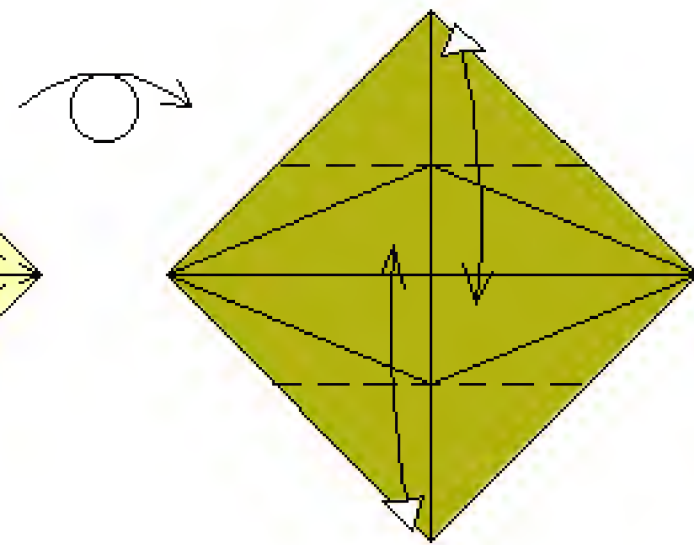
©Hans Birkeland 1997  
Use foil-backed paper



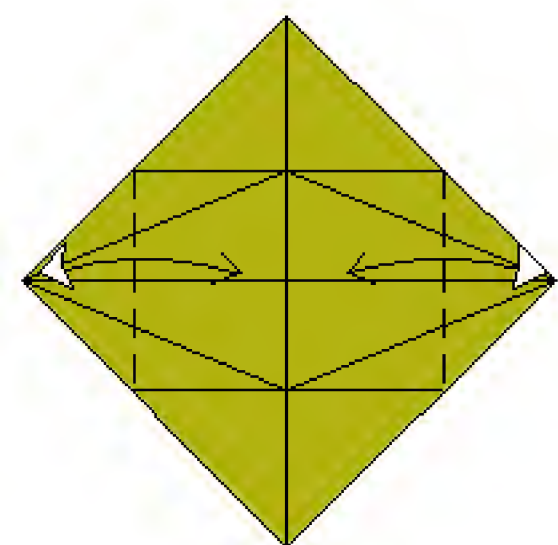
**1** Begin with the white side up. Fold and unfold the diagonals.



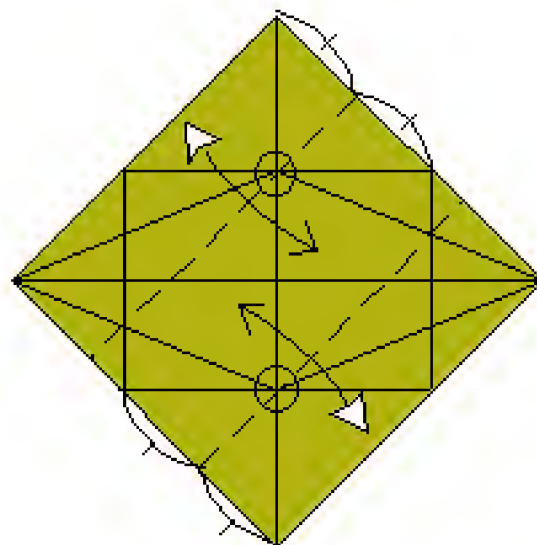
**2** Fold and unfold the angle bisectors. Turn the paper over.



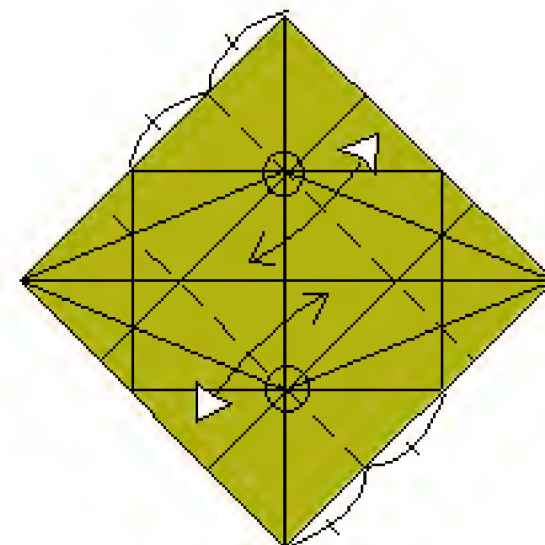
**3** Fold and unfold.



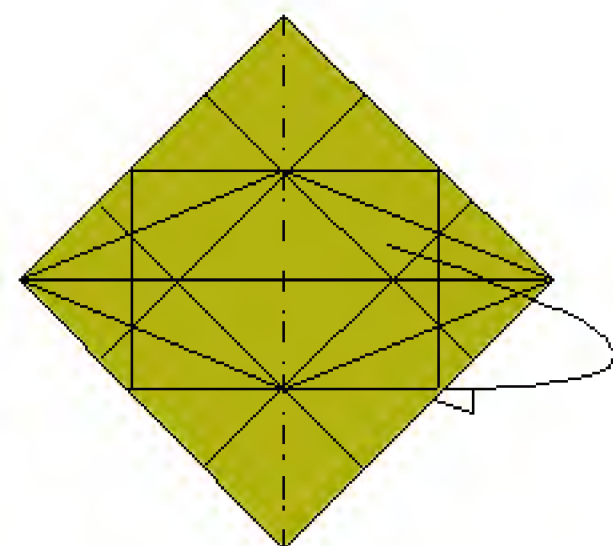
**4** Fold and unfold.



**5** Fold and unfold.



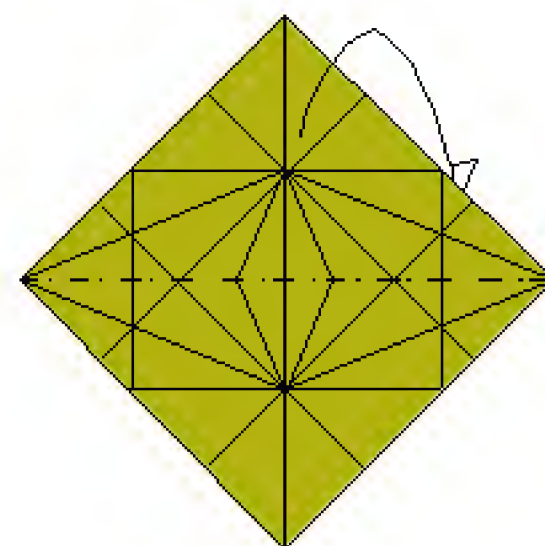
**6** Fold and unfold.



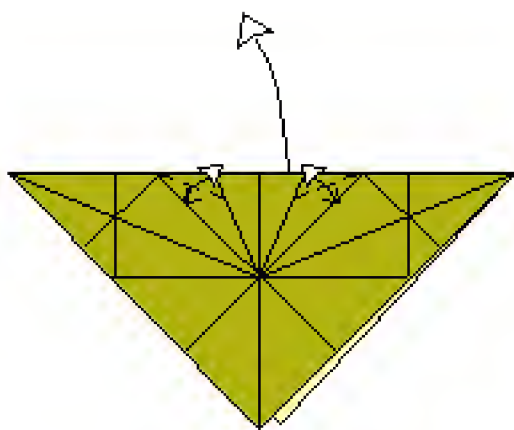
**7** Mountain-fold behind.



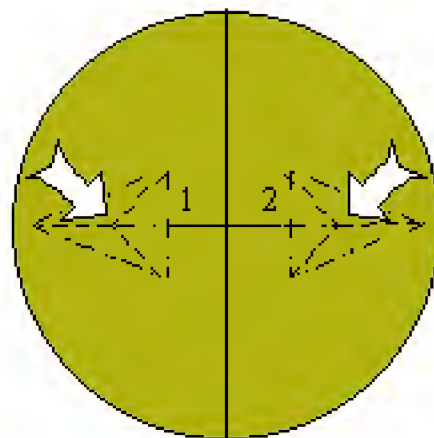
**8** Fold and unfold the angle bisectors through both layers. Unfold to step 7.



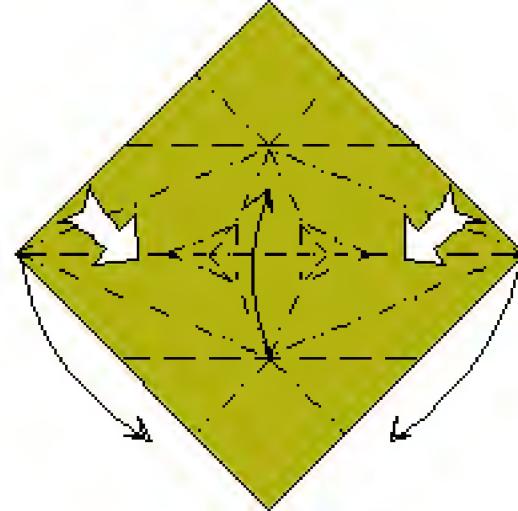
**9** Mountain-fold behind.



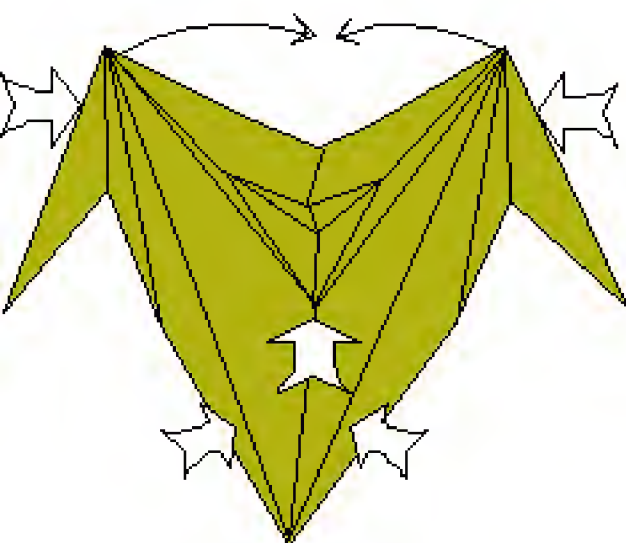
- 10** Fold and unfold the angle bisectors through both layers. Unfold.



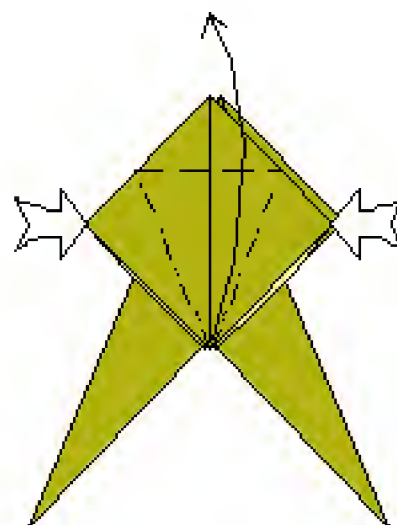
- 11** Enlarged view. Make the two vertical mountain-folds and then start pushing in the area within the triangles (see next step).



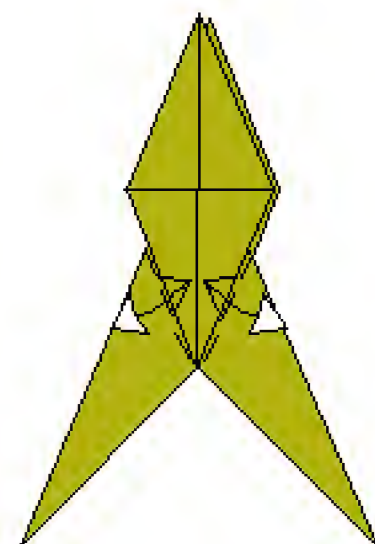
- 12** Collapse on existing creases. Next step shows this step seen from the side.



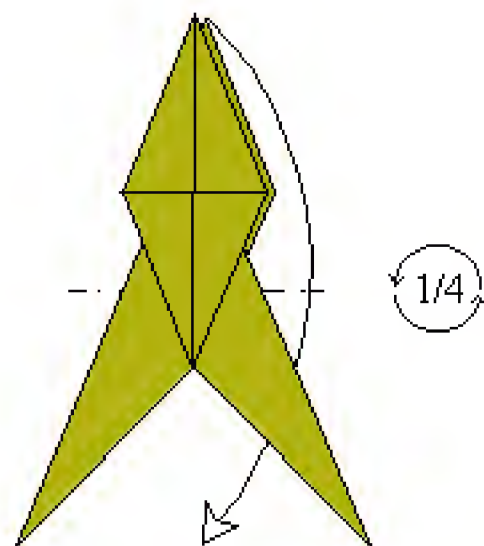
- 13** Step 12 seen from the side, partially collapsed.



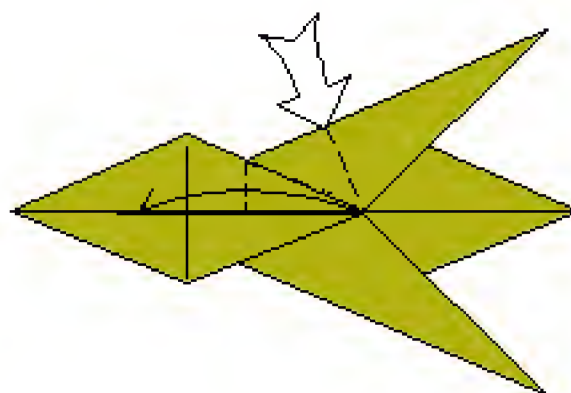
- 14** Petal-fold. Repeat behind.



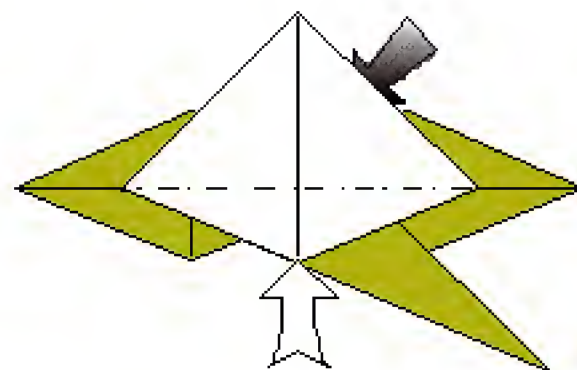
- 15** Fold and unfold through all layers.



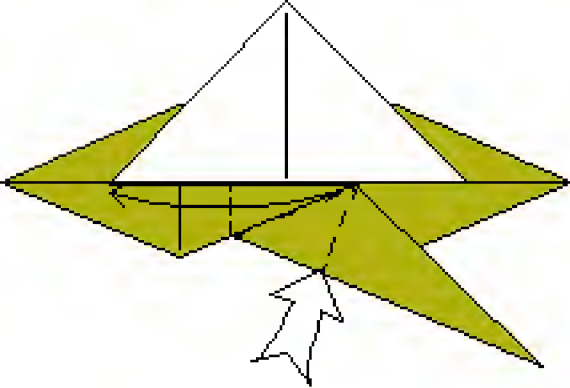
- 16** Fold the flap at the back down as far as it will go. Rotate the model.



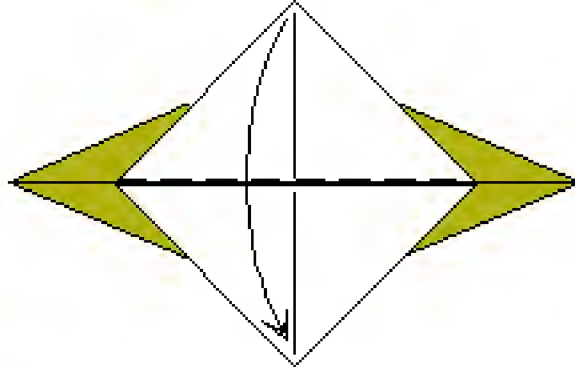
- 17** Swivel-fold. Repeat on the right, thus being able to squash flat (see next step).



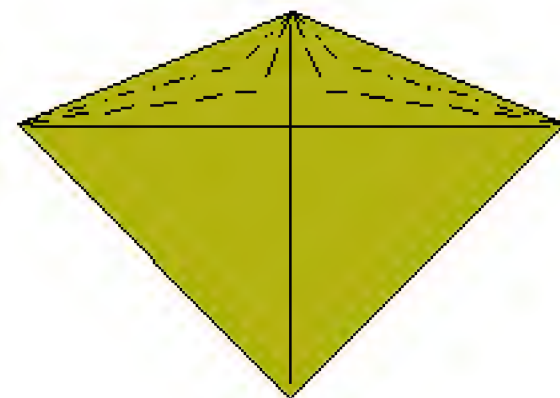
- 18** Like this. Closed-sink the lower triangle upward.



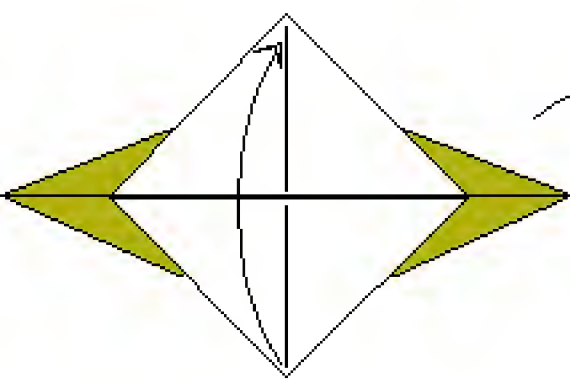
**19** Repeat steps 17-18 on the lower flap.



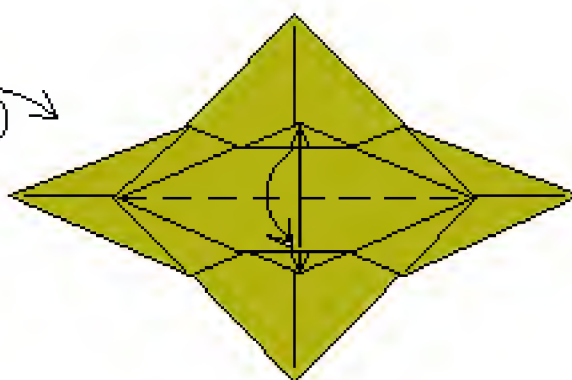
**20** Fold the upper flap down.



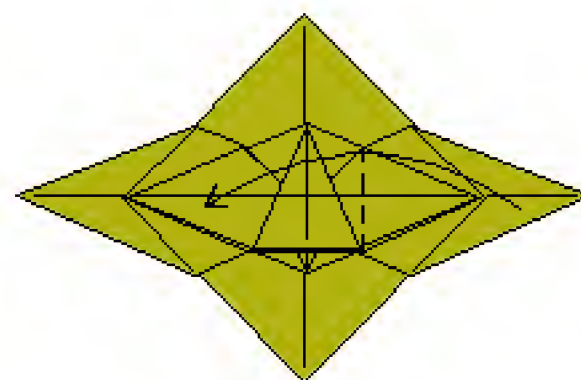
**21** Enlarged view of the center flap. Pre-crease the upper part, dividing in thirds. Then unfold to step 20.



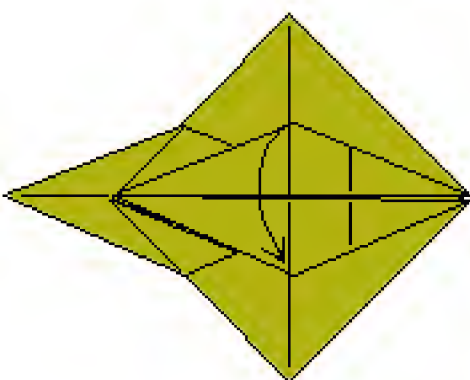
**22** Repeat steps 20-21 on the lower flap. Turn the model over.



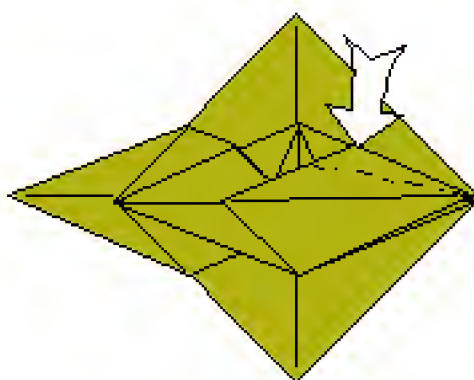
**23** Valley-fold one edge down.



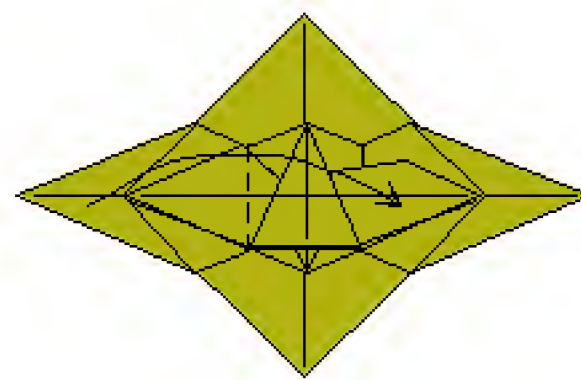
**24** Fold the right flap to the left as far as it will go.



**25** Fold down one layer.

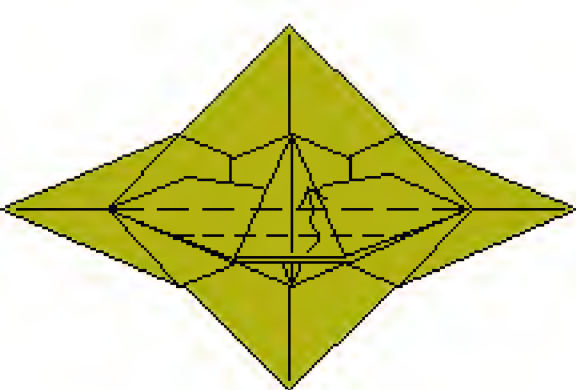


**26** Open-sink the edge on the angle bisector. Then refold to step 24.

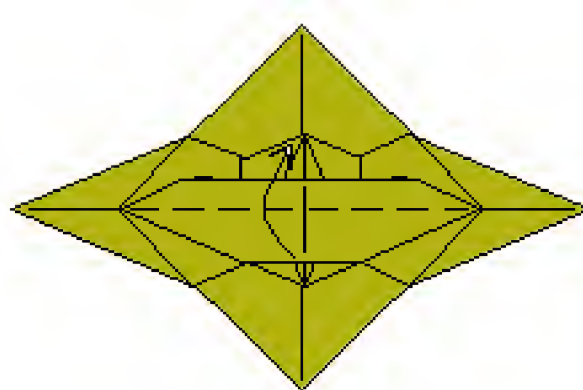


**27** Repeat steps 24-26 on the top left.

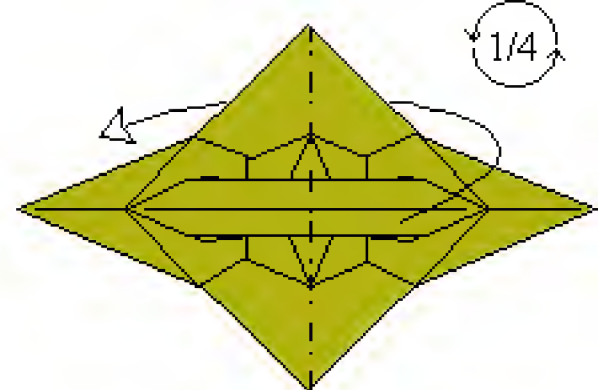




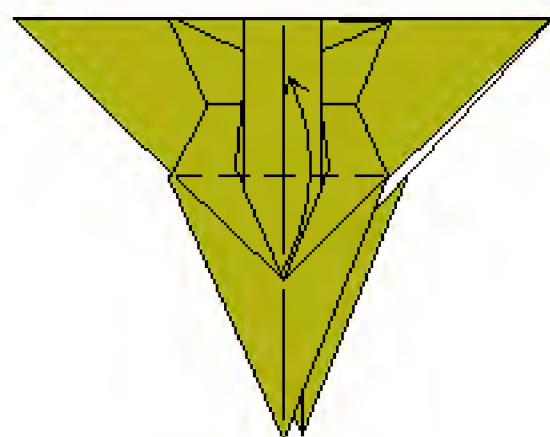
**28** Fold over and over.



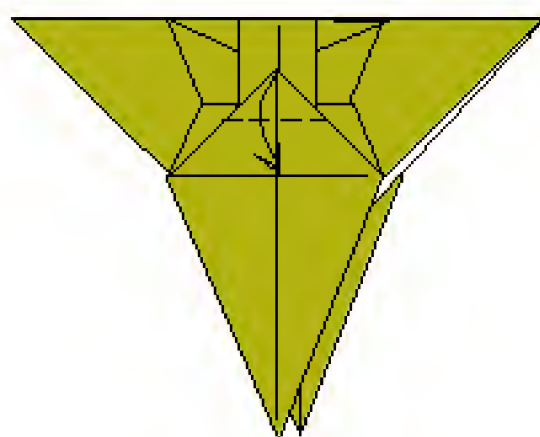
**29** Repeat steps 23-28 below.



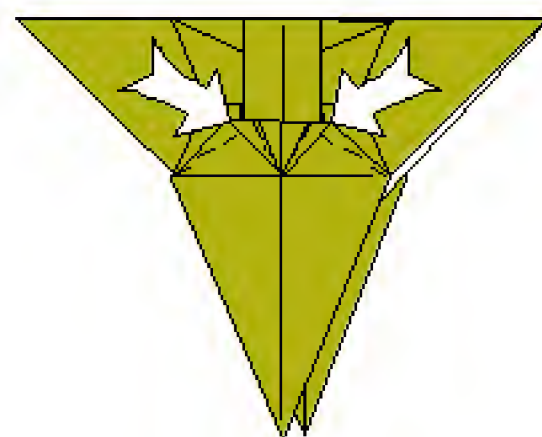
**30** Mountain-fold in half. Rotate.



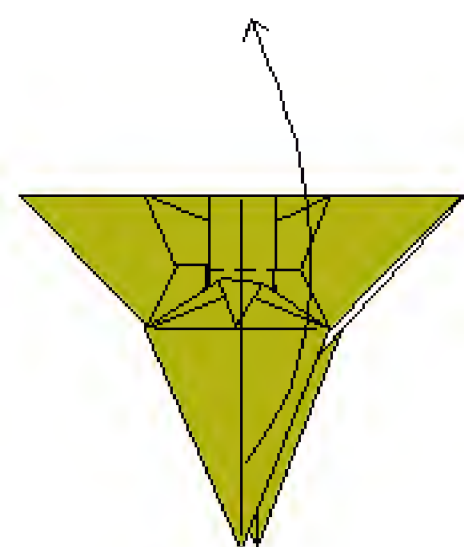
**31** Valley-fold.



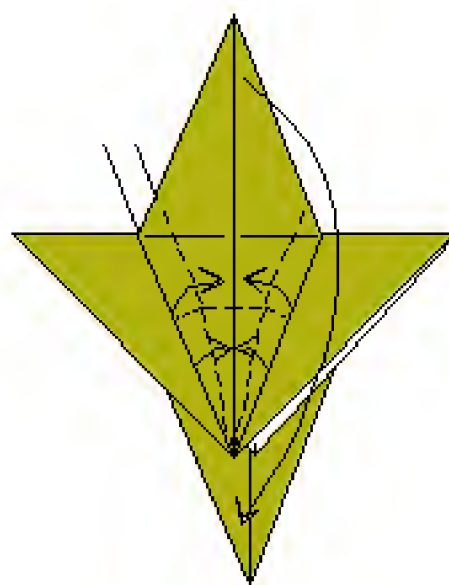
**32** Valley-fold.



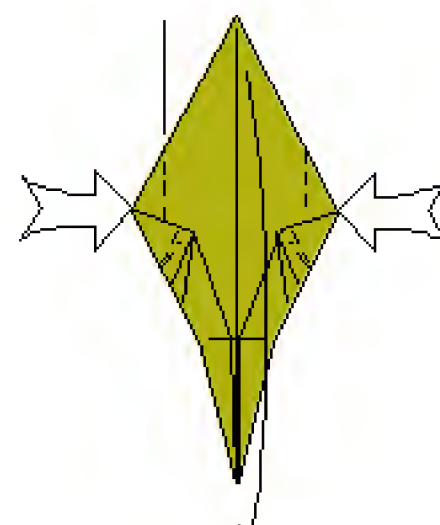
**33** Swivel-fold.



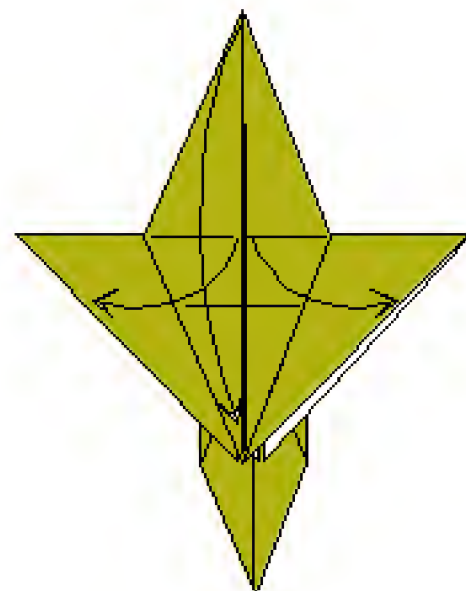
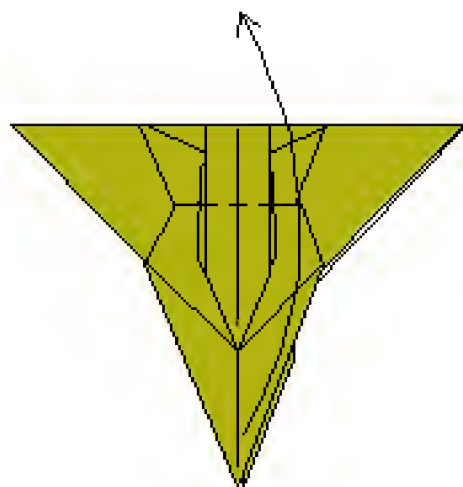
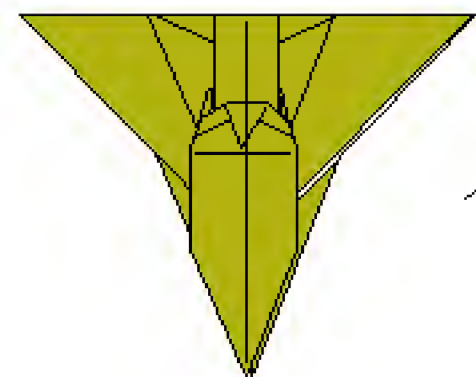
**34** Valley-fold.



**35** Fold in the edges as the large flap is folded down. See next step.



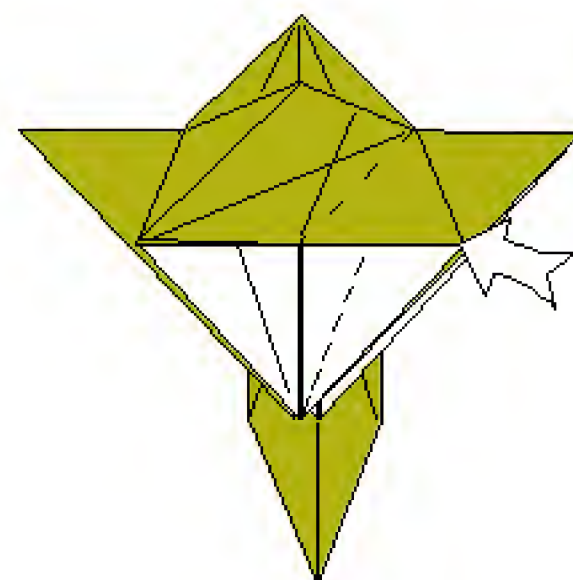
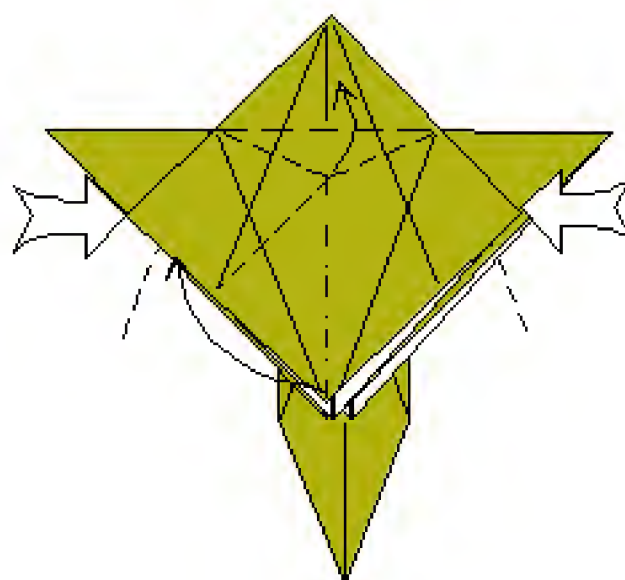
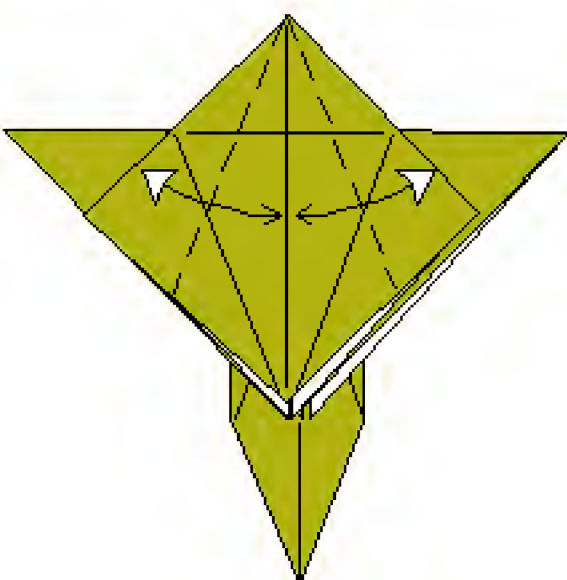
**36** In mid-air. Swivel-fold. Continue folding the flap down.



**37** Turn the model over.

**38** Valley-fold.

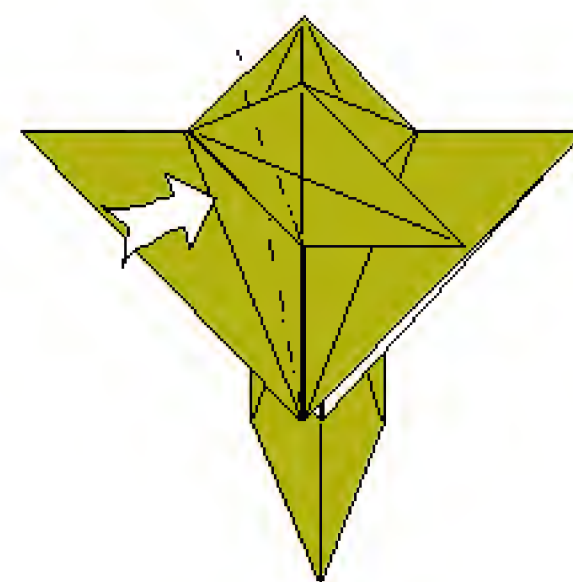
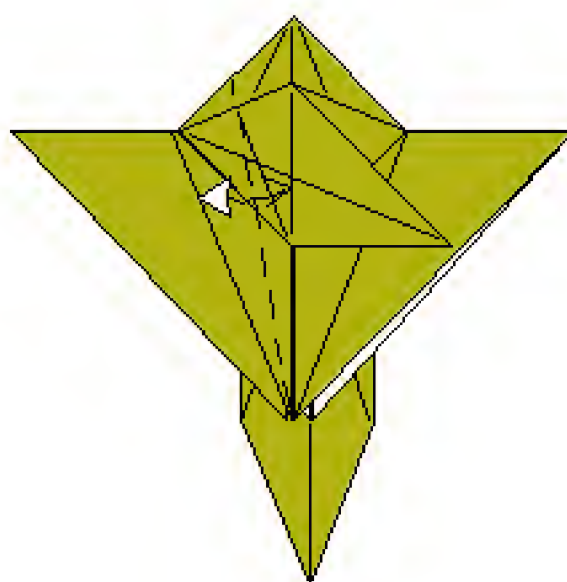
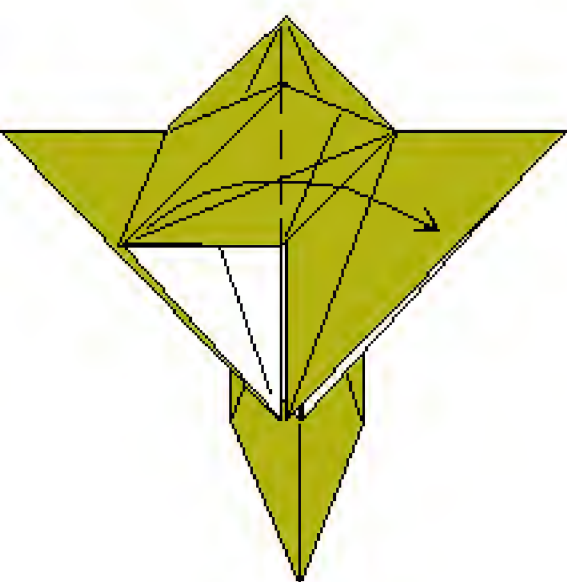
**39** Unfold the petal fold.



**40** Fold and unfold.

**41** Squeeze the sides together and swing the bottom flap over to the left. See next step.

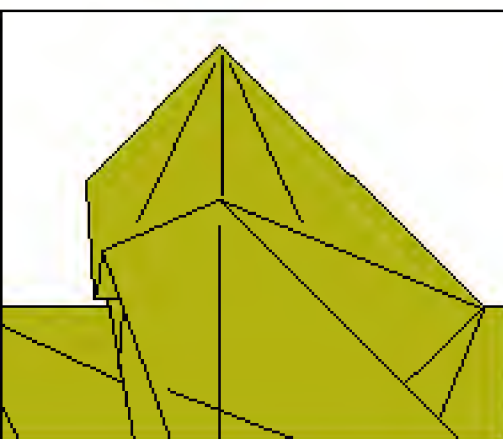
**42** Reverse-fold.



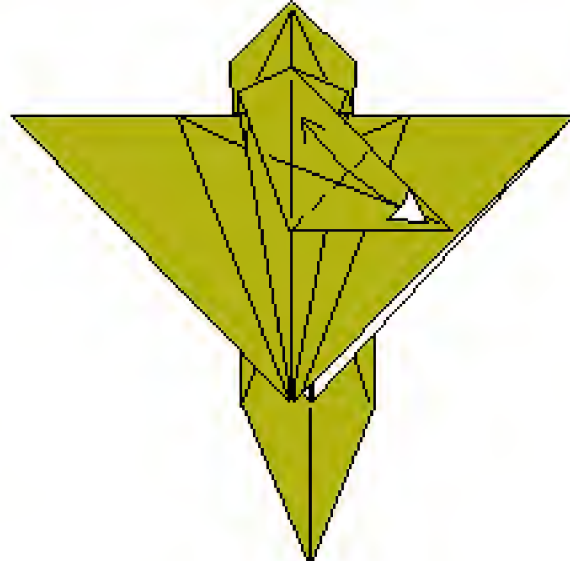
**43** Valley-fold the center flap to the right, and repeat step 42 on the left side.

**44** Fold and unfold.

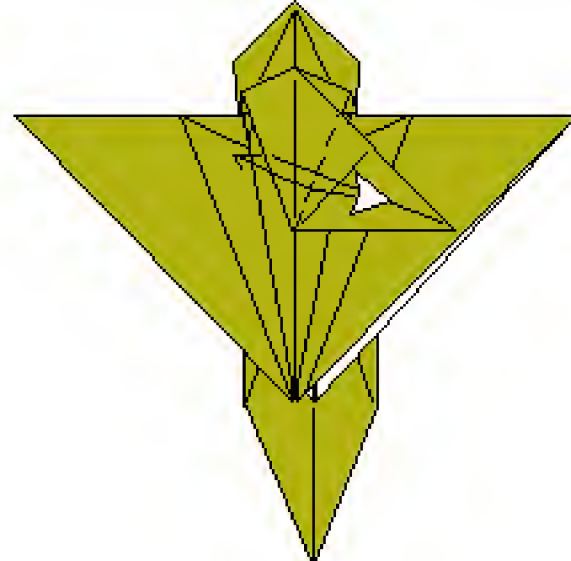
**45** Open sink.



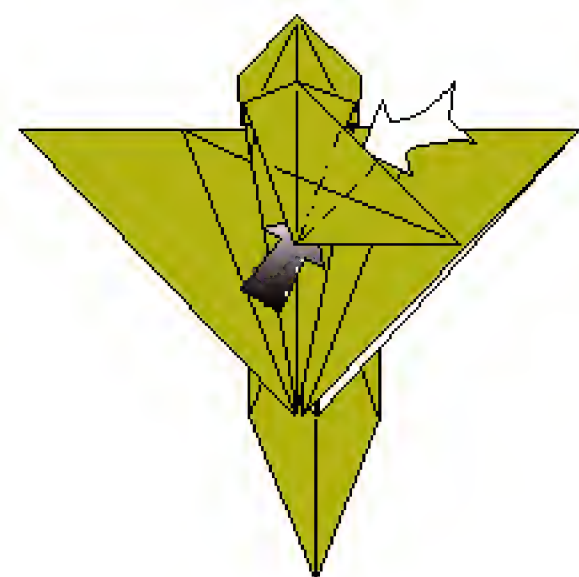
**46** Detail of sink. Repeat steps 44-45 on the left side.



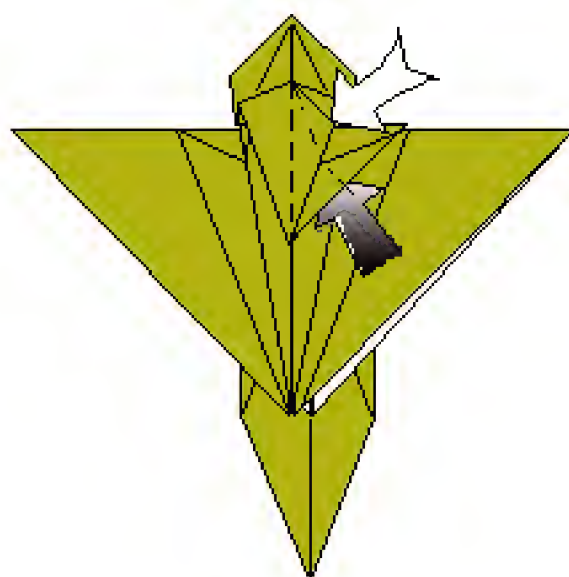
**47** Fold and unfold the angel bisector.



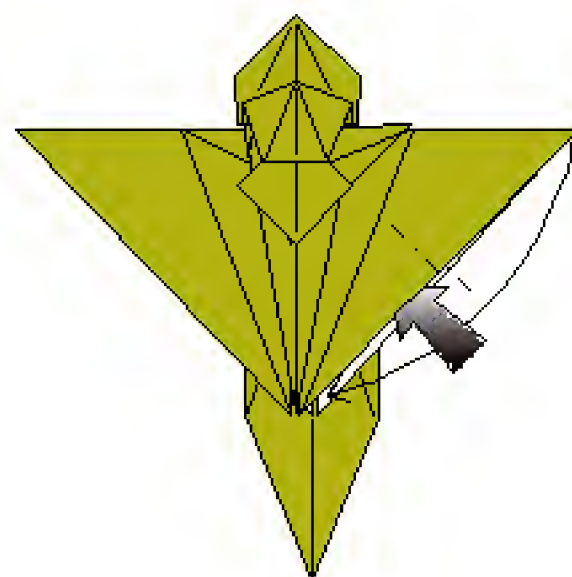
**48** Fold and unfold the angle bisector.



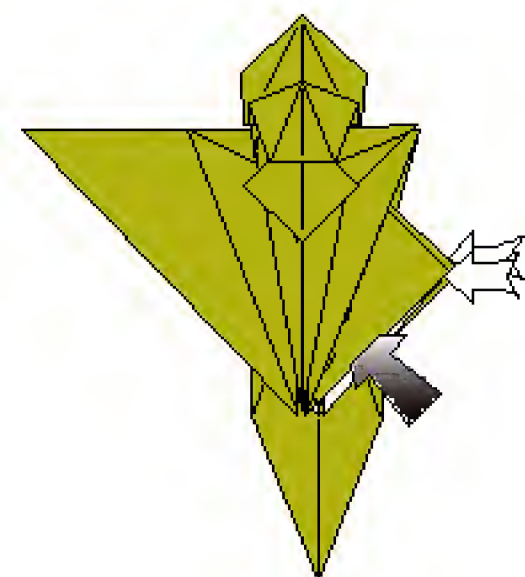
**49** Reverse-fold in and out.



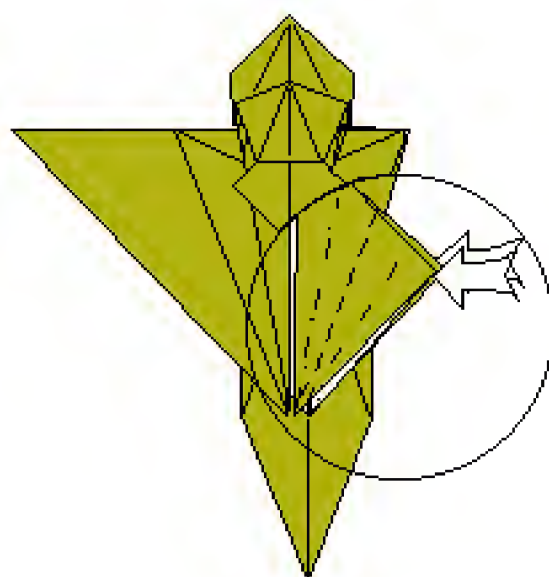
**50** Spread-squash.



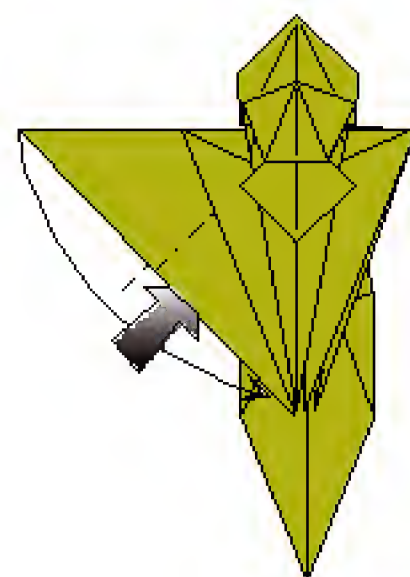
**51** Reverse-fold.



**52** Reverse-fold two edges. Then unfold.

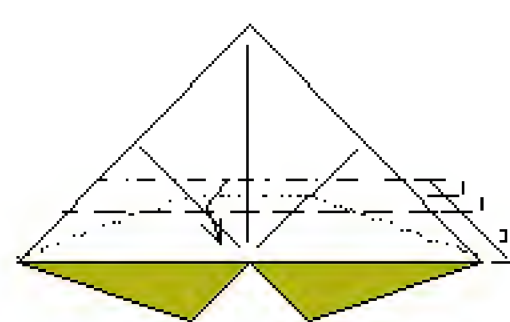
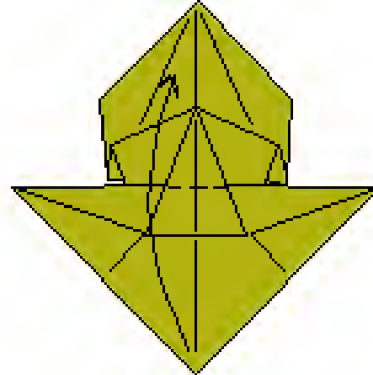
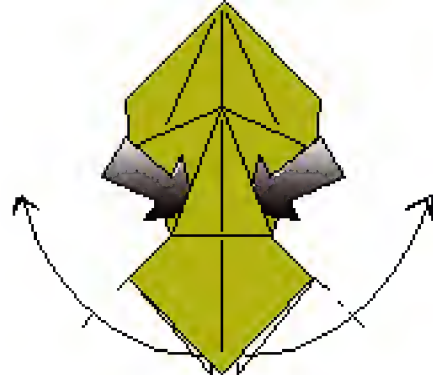


**53** Cut-away view. Reverse-fold each edge three times. The valley fold is on the crease made in step 52.



**54** Repeat steps 51-53 on the left flap. This is easier if the right flap is unfolded during the process.

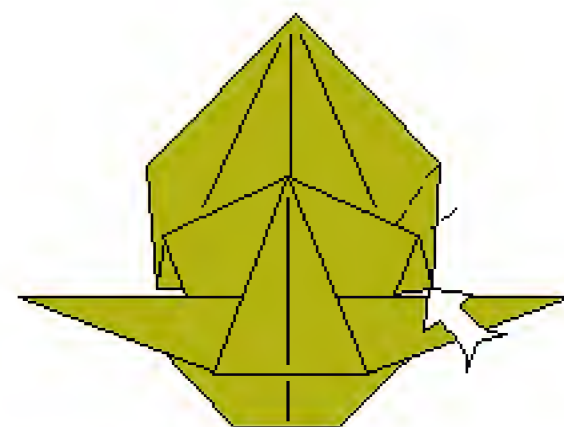
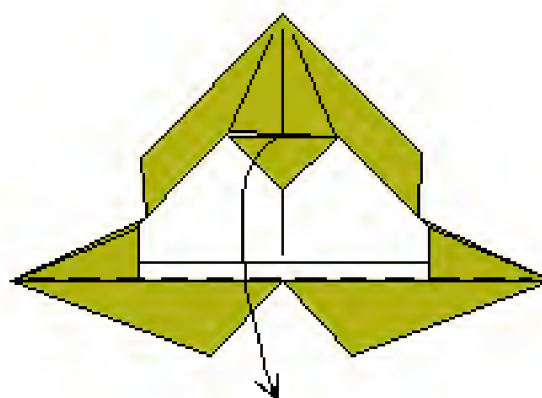
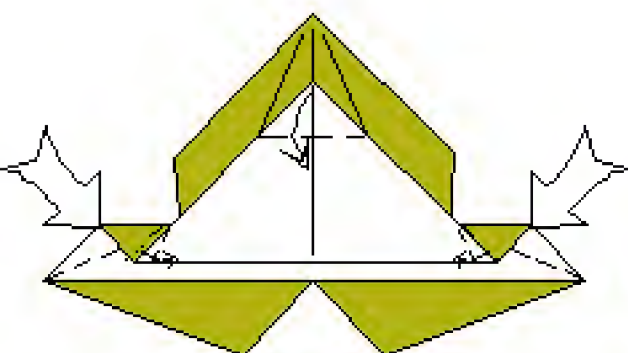




**55** Enlarged view of the head. Reverse-fold the antennae to each side as far as they will go.

**56** Lift the flap upward without pressing flat.

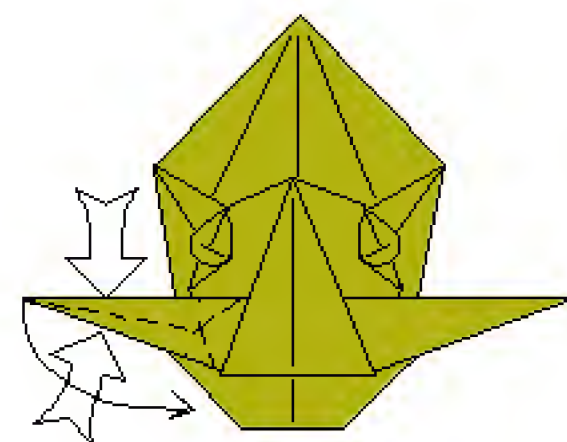
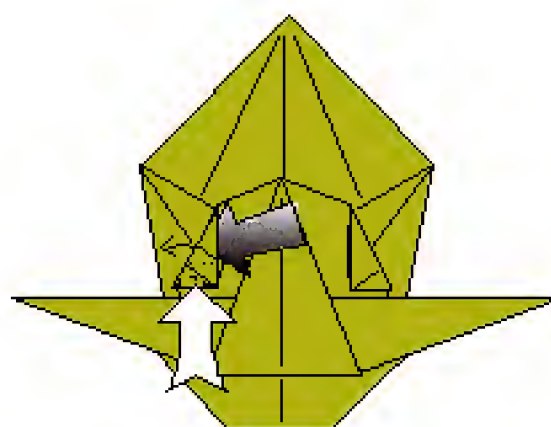
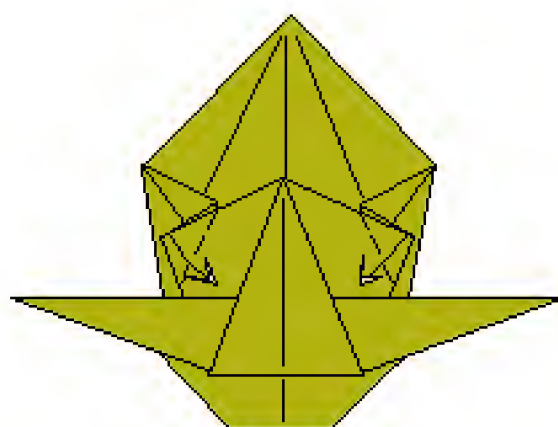
**57** Pleat-fold. The divisions, using the edge behind, are approximate.



**58** Swivel-fold the sides. Valley-fold the top corner.

**59** Fold down.

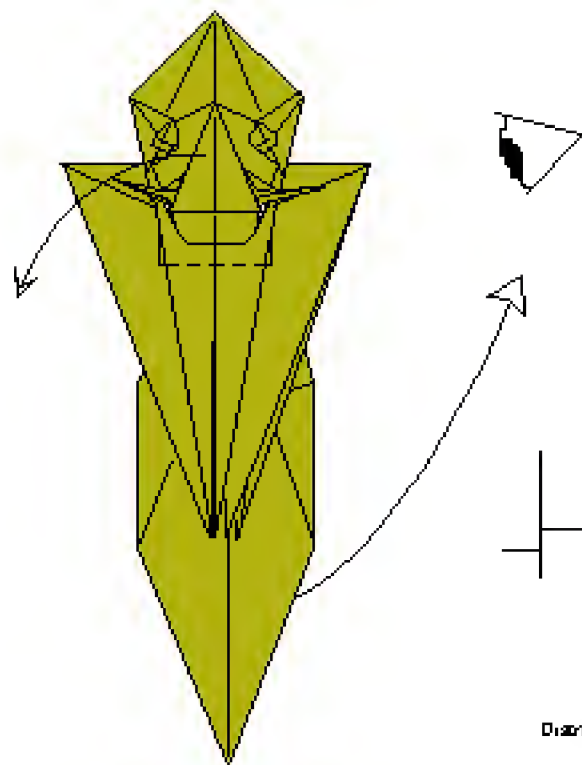
**60** Reverse-fold. Repeat on the left side.



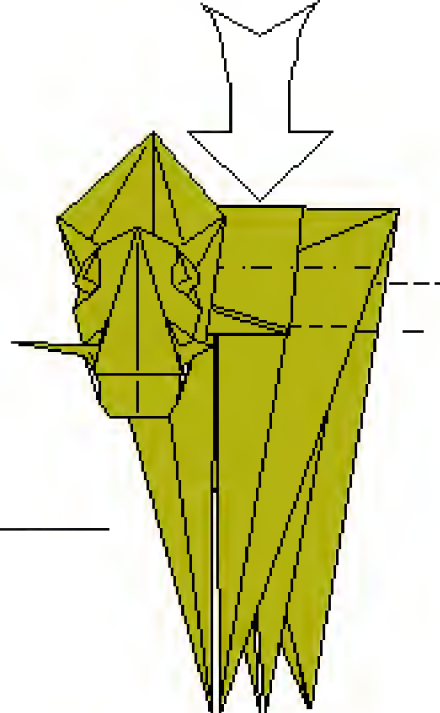
**61** Valley-fold.

**62** Open up the eyes and squash flat.

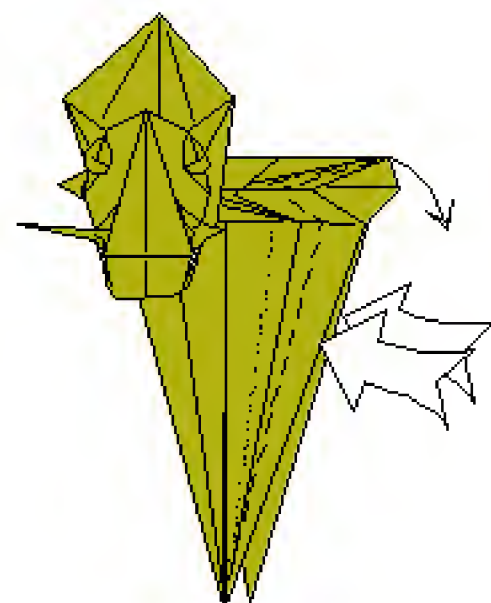
**63** Rabbit-ear the antennae so that they point straight out toward you.



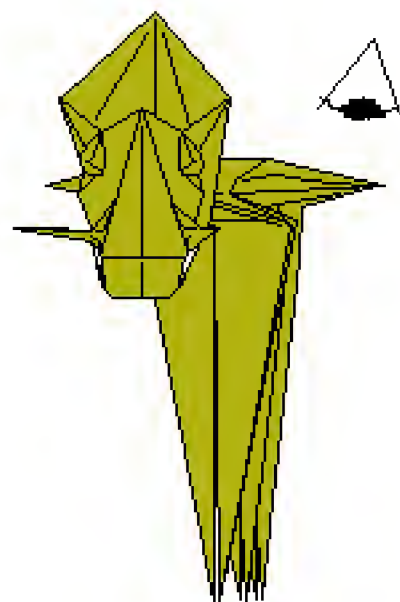
**64** Lift the flap at the back and fold the head to the front. Next view from the right side.



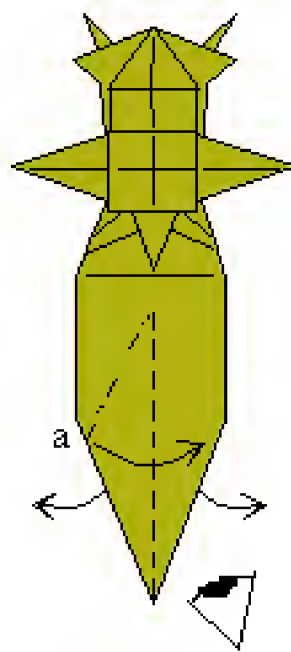
**65** The back-body is not shown. Squash the thick edge flat.



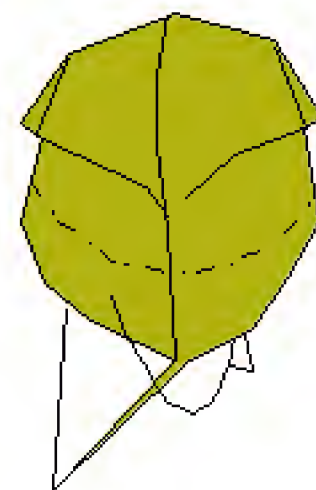
**66** Collapsing on the creases made in step 21, put the two edges inside the nearest pockets. The resulting point will point slightly downward. Repeat behind.



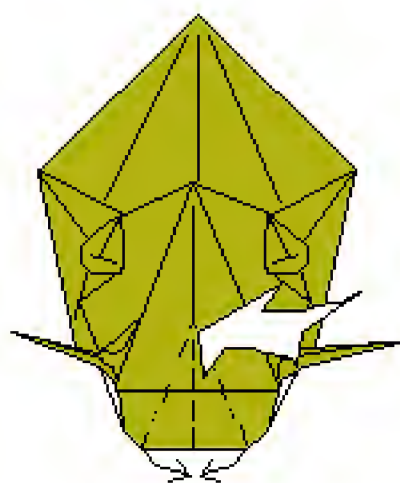
**67** Like this. Next view from top of back-body.



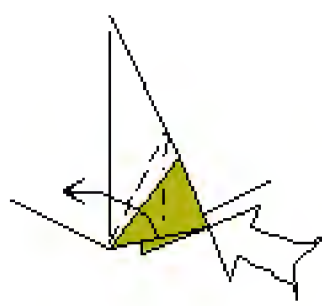
**68** Open up the edges below and fold corner **a** over to the right. The body becomes 3-dimensional.



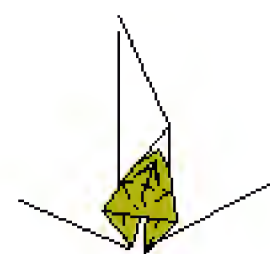
**69** View from behind. Fold the edge inside.



**70** Detail of head. Push in where indicated. Press the jaws together and fold the resulting edge to the left at the back-side. Next view from behind the jaws.

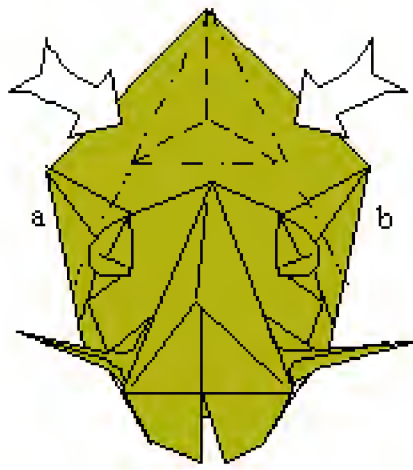


**71** Squash-fold.

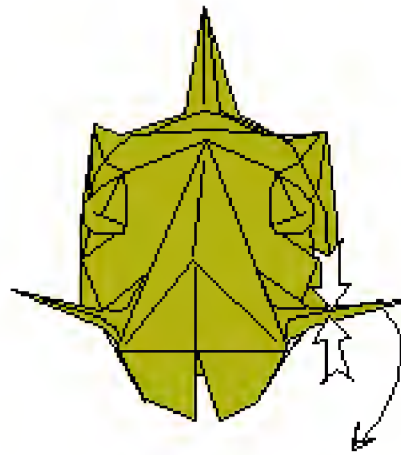


**72** Petal-fold.

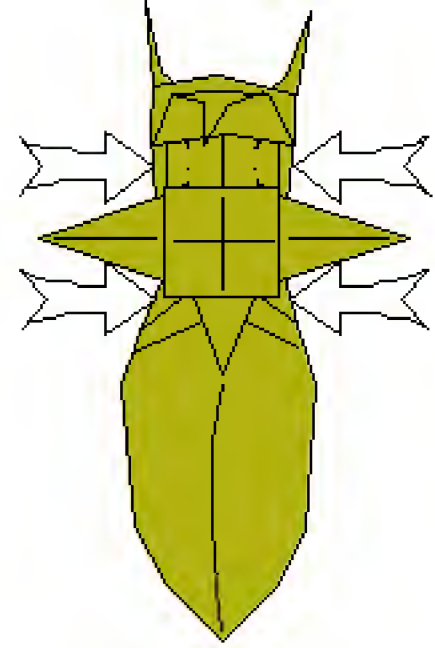




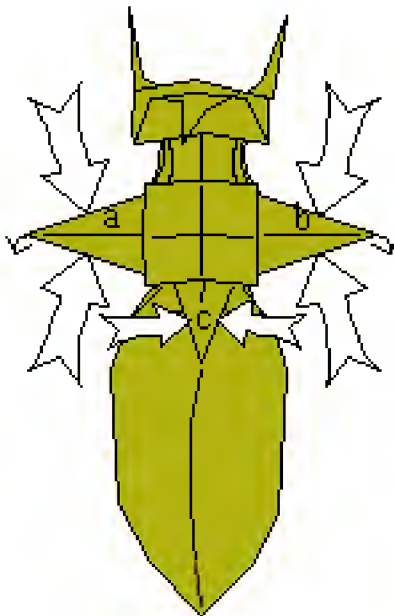
- 73** Collapse to make a point partly on existing creases. Edge **a** and **b** will point straight backward.



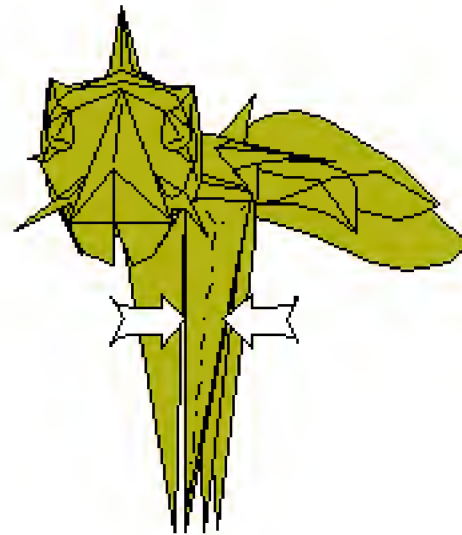
- 74** The head is now 3-D. Pinch and form the antennae.



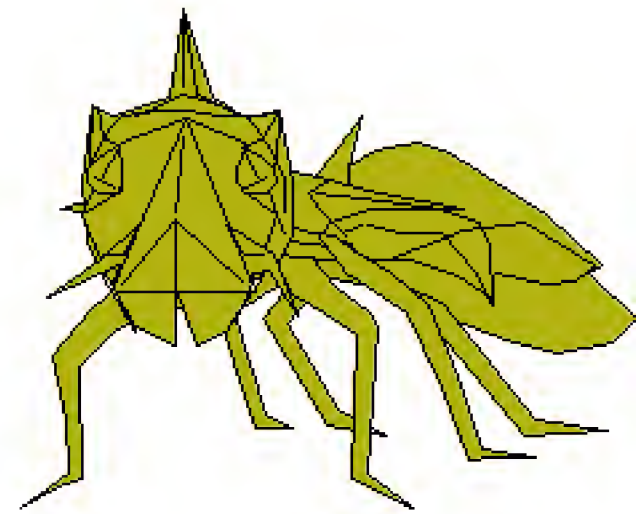
- 75** Pinch between the head and mid-body, and between the mid-body and back-body.



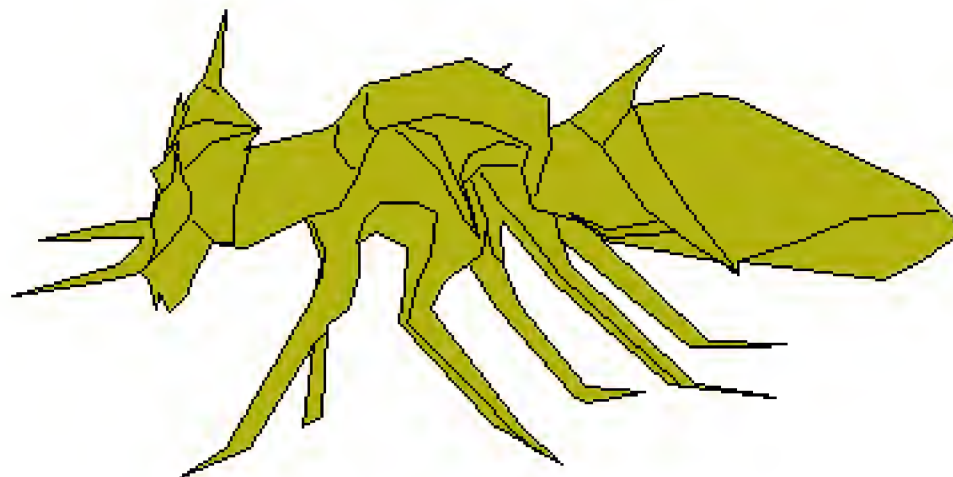
- 76** Pinch points a, b and c. Point c should be slightly raised.



- 77** Pinch the two front pairs of legs with mountain folds, and the third pair with valley folds. Then curve and form the legs to make feet etc.



- 78** The finished Spined Ant.



Side view.